

REMARKS

Claims 1-20 were presented for examination. Claims 18-20 were withdrawn pursuant to a restriction requirement. Claims 1-17 are limited to compounds of formula (1) where none of the structures represented by R^1 , R^2 , L^1 , X^1 , A^1 , A^2 , or W contain an additional heterocycle, which is consistent with the election of Group I in response to the restriction requirement. The Examiner recited a somewhat narrower scope for this claim in the Office Action and stated that “the remaining subject matter of Claims 1-17 [is] withdrawn from further consideration”, but the applicants understand the scope of the claims to be defined by the restriction requirement at this point, and have amended the claims accordingly.

Claim 1 has been amended to remove the possibilities for R^1 , R^2 , L^1 , X^1 , A^1 , A^2 , or W to contain a heterocycle, and claims 8, 9, 11, and 13-15 were amended to correspond to the amended scope of claim 1. Claim 1 was further amended to replace the term ‘noninterfering substituent’ with a recitation of specific groups taken from paragraph [0025] of the specification, where noninterfering substituents are further described. The description for R^2 includes H, which is supported by paragraph [0028]. The recited groups again have been described to avoid incorporating an additional heterocycle in the substituents, consistent with the election of Group I pursuant to the restriction requirement.

Claim 1 was also amended to incorporate an additional proviso that is supported by paragraph [0024].

New claims 21-23 were added. Claims 21-22 are supported by paragraph [0055], and claim 23 is supported by paragraph [0056].

The amendments add no new matter. Entry of the amendments and reconsideration in view of the following comments are respectfully requested.

Rejections under 35 U.S.C. § 112

Claims 1-14 and 16 were rejected based on the written description requirement of 35 U.S.C. 112. This rejection alleges that the term 'noninterfering substituent', which was used to describe certain features of the compounds of formula (1), describes an indefinite number of substituents and does not demonstrate that the applicant was in possession of the invention at the time the application was filed. The Examiner further alleged that this term was indefinite.

The term 'noninterfering substituent' has been replaced by the present amendment with a recitation of specific structural features. These features define the compounds of formula (1) by precise structural limitations that are fully supported by the specification and are taken from the description of noninterfering substituents. Accordingly, in view of the amendment, this rejection can be withdrawn.

Rejections under 35 U.S.C. § 102

Claims 1-14 and 16 were rejected under 35 U.S.C. 102 as allegedly anticipated by Kuroita, et al., U.S. Patent No. 6,468,998. The Examiner cited a specific compound alleged to fall within the scope of the claims.

The compounds in Kuroita that the Examiner cites as prejudicial to novelty have a 3-amino pyrrolidine, and the 3-amino group is substituted by a diphenylacetyl group that may have substituents on the phenyl rings. Claim 1 has been amended to add a proviso that clearly distinguishes the claimed compounds from those disclosed in Kuroita. The portion of a compound of formula (1) that corresponds to the diphenylacetyl of the Kuroita compounds is $L^1-X^1(A^1)(A^2)$. The proviso requires this portion of a compound of formula (1) that corresponds to the diphenylacetyl of Kuroita's compounds to have "at least three linking atoms if X^1 is CH and W is L^2-A^3 , wherein L^2 contains two linking atoms and A^3 represents optionally substituted phenyl." The compound that the Examiner cited in this rejection, and apparently all of the other examples in Kuroita, would be excluded from the scope of claim 1 by this proviso, because the compounds in Kuroita appear to have only one linking atom between X^1 and the 3-amino group on the pyrrolidine

ring when the compounds contain a feature that corresponds to $X^1(A^1)(A^2)$. In view of the amendment, this rejection should thus be withdrawn.

Rejections under 35 U.S.C. § 103

Claims 1-17 were rejected over Kuroita under 35 U.S.C. 103(a), because the Examiner alleged that Kuroita teaches compounds of a general base formula that includes a 3-amino-pyrrolidine, and that it permits groups R^1 , R^2 , X, R^9 , D and Ar of that general formula to be features that could be combined to produce a compound that would fall within the scope of the present claims. According to the Examiner,

Therefore, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to follow the synthetic scheme of Kuroita et al. and make the claimed invention with a reasonable expectation of success. The motivation to do so is provided by Kuroita et al. Kuroita et al. teach the use of the synthesized compounds to antagonize 5-HT₂ to treat glaucoma and other ailments. See column 17, lines 51-63.

The applicant respectfully traverses this rejection. First, the claims have been amended to clearly distinguish the compounds of the claims from those of Kuroita. With that amendment, Kuroita does not provide a reasonable expectation that any of the compounds in the scope of the claims would antagonize 5-HT₂. Thus the person of ordinary skill would have no motivation to make such compounds.

Second, the Examiner's analysis would require the person of ordinary skill to select certain options for R^1 , X, R^2 , R^9 , D and Ar from the reference. Each of these variables can represent a large number of alternative structural features; e.g., there are 8 different substructures that can be used for R^1 . Getting to compounds that could contain the $X^1(A^1)(A^2)$ feature requires selecting the proper R^1 , i.e., structure (2) or (3) in Kuroita, then selecting Y to be absent and selecting A and B rings of R^1 that would fall within the present claims. All of those selections must be made just to arrive at a compound containing features that would correspond to W in the present claims. Then one would have to select an appropriate D and Ar to arrive at a group that corresponds to an L^2-A^3 group that is within the scope of the claims; again, Kuroita discloses numerous options for each of

those variables. Then selections of R^2 , X, and R^9 would have to be made to arrive at compounds corresponding to those of the present claims: the reference provides limited guidance for making such selections, and thus does not suggest the compounds of the present claims. The claims as amended clearly distinguish the L^2 - A^3 group of the claimed compounds from the D-Ar groups in the compounds Kuroita discloses, for example, thus the reference does not provide motivation to make these selections. Nor does it demonstrate that such compounds would be active as 5-HT₂ antagonists. Thus the reference does not provide motivation to select structural features that would produce a compound within the scope of the claims, nor does it provide a reasonable expectation that such compounds would be active.

Compound claims, like other claims, must be considered “as a whole.” See MPEP 2144.08. Even if the presently claimed genus overlaps with a prior art genus, that alone does not establish a *prima facie* case for an obviousness rejection: the reference must suggest the claimed genus, not just the individual features of a compound that would fall inside that genus. According to *In re Baird*, 29 USPQ2d 1550 (FC 1994) and MPEP 2144.08, “The fact that a claimed species or subgenus is encompassed by a prior art genus is not sufficient by itself to establish a *prima facie* case of obviousness.” Thus even if a compound within the scope of the present claims *could* be constructed by properly selecting parts that are separately disclosed within the scope of a broad genus in a reference, the present claims are not rendered obvious by that alone. Only if the reference provides motivation to make the numerous selections necessary to arrive at the combination of features in the claimed compounds does the reference render the claims obvious. See MPEP 2144.08(II)(A)(4). (“The prior art must provide one of ordinary skill in the art the motivation to make the proposed molecular modifications needed to arrive at the claimed compounds.”) Here, one of ordinary skill based on Kuroita would not have had motivation to select the combination of features of the compounds of claim 1. Accordingly, the reference does not establish a *prima facie* case of obviousness for the claimed compounds, and the rejection under 35 U.S.C. 103 should be withdrawn.

New claims 21-22 further distinguish the claimed invention from Kuroita, since they recite L^1 having 3-6 members, and none of the compounds of Kuroita disclose or suggest the

desirability of this feature, nor does Kuroita provide a reasonable expectation that such compounds would be active.

Double Patenting Rejection

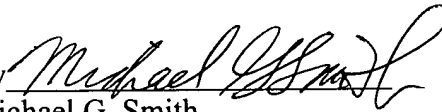
The Examiner also imposed an obviousness-type double patenting rejection based on Kuroita. This is not a proper rejection, however: the judicially-created obviousness-type double patenting doctrine applies where a claim is considered an obvious variation of a claim in a commonly owned patent or application, and can be addressed by a proper terminal disclaimer. The present application is not commonly owned with the Kuroita reference, thus it is not subject to an obviousness-type double patenting rejection. Since the Examiner also indicated that the claims “are not identical”, there is no basis for a double patenting rejection, either. Accordingly, this rejection should be withdrawn.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue. If it is determined that a telephone conference would expedite the prosecution of this application, the Examiner is invited to telephone the undersigned at the number given below.

In the event the U.S. Patent and Trademark office determines that an extension and/or other relief is required, applicants petition for any required relief including extensions of time and authorize the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing Docket No. 381092001600. However, the Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Dated: November 2, 2006

Respectfully submitted,

By 
Michael G. Smith
Registration No.: 44,422
MORRISON & FOERSTER LLP
12531 High Bluff Drive
Suite 100
San Diego, California 92130-2040
(858) 720-5113